

IN THE CLAIMS:

Please cancel claims 100-120, 122, and 123 without prejudice.

1-80 (Canceled)

81. (Previously presented) A processing chamber, comprising:
a chamber body;
a substrate support member disposed within the chamber body;
a retaining ring having one or more feedthrough holes formed therein;
one or more feedthroughs disposed in the one or more feedthrough holes;
a chamber lid connected to the retaining ring by the one or more feedthroughs,
the chamber lid comprising a first plate coupled to a second plate, wherein the first plate
and the second plate form a temperature control channel; and
a fluid inlet and a fluid outlet formed in the chamber lid, wherein the fluid inlet and
the fluid outlet are fluidly coupled to the one or more feedthroughs.
82. (Previously presented) The processing chamber of claim 81, wherein the
chamber lid further comprises one or more feedthrough pockets in which the one or
more feedthroughs are received to connect the chamber lid to the retaining ring.
83. (Previously presented) The processing chamber of claim 82, wherein at least
one of the one or more feedthroughs comprises an enlarged engagement portion, the
enlarged engagement portion being insertable into a portion of a feedthrough pocket.
84. (Previously presented) The processing chamber of claim 82, wherein at least
one of the one or more feedthrough pockets comprises a pocket shoulder for receiving
a sealing element therein.
85. (Previously presented) The processing chamber of claim 81, further comprising
a fastener adapted to attach the feedthrough to the retaining ring.

86. (Previously presented) The processing chamber of claim 81, wherein the retaining ring further comprises one or more fluid passages fluidly connected to the one or more feedthrough holes.

87. (Previously presented) The processing chamber of claim 81, wherein each feedthrough comprises:

an axial channel along a portion of a length of the feedthrough; and
one or more transverse ports fluidly connected to the axial channel.

88. (Previously presented) The processing chamber of claim 81, wherein the retaining ring further comprises an alignment shoulder adapted to align the chamber lid to the retaining ring.

89. (Previously presented) The processing chamber of claim 81, wherein the first plate and the second plate each form a portion of the depth of the temperature control channel.

90. (Previously presented) The processing chamber of claim 81, wherein the temperature control channel is continuous between the fluid inlet and the fluid outlet.

91. (Previously presented) The processing chamber of claim 81, further comprising one or more feedthrough pockets fluidly connected to the temperature control channel, wherein at least one feedthrough pocket is fluidly connected to a feedthrough, and wherein the feedthrough secures the chamber lid to the retaining ring.

92. (Previously presented) The processing chamber of claim 81, wherein the temperature control channel forms a circuitous pattern substantially throughout the chamber lid.

93. (Previously presented) The processing chamber of claim 81, wherein the surface area of the temperature control channel comprises between about 30% and about 60% of the surface area of the chamber lid.

94. (Previously presented) The processing chamber of claim 81, wherein the temperature control channel is structured and arranged to cover between about 30% to about 60% of the surface area of the chamber lid.

95. (Previously presented) The processing chamber of claim 81, wherein the chamber lid comprises a material selected from the group of aluminum oxide, aluminum nitride, silicon carbide, silicon, polysilicon and combinations thereof.

96. (Previously presented) The processing chamber of claim 81, wherein the temperature control channel is formed by a groove in one of the plates and a generally smooth face of the other plate.

97. (Previously presented) The processing chamber of claim 81, wherein the temperature control channel is formed by at least one groove in each of the first and second plates.

98. (Previously presented) The processing chamber of claim 81, wherein the temperature control channel is arcuate, radial, meandering or a combination thereof.

99. (Previously presented) The processing chamber of claim 81, wherein a surface of the second plate is textured.

100-120. (Canceled)

121. (Previously presented) A processing chamber comprising:
a chamber body;
a substrate support member disposed within the chamber body;

a retaining ring coupled to the chamber body, wherein the retaining ring has a feedthrough hole formed therein;

a chamber lid coupled to the retaining ring, wherein the chamber lid forms a fluid inlet, a fluid outlet, and a temperature control channel, and wherein the temperature control channel is fluidly connected to the fluid inlet and fluid outlet; and

a feedthrough disposed in a feedthrough hole, wherein the feedthrough is fluidly connected to the temperature control channel, and wherein the feedthrough attaches the chamber lid to the retaining ring.

122-123. (Canceled)